

femora, but ventrally white scaled to the apex; tarsal joints all brown. With the exception of the femora, all the parts of the legs show a decided variation as to color, dependent on the angle of light. Ungues of female serrate, those of the male fore legs have both the unguis serrate.

Wing clear, covered with brown rather heavy *Taniorhynchus*-like scales. The first sub-marginal cell is about three times as long as its stem, and nearly a third longer and as wide as the second posterior cell, which is about the same length as its stem. The mid cross-vein meets the root of the third long vein and they are of about equal length, while the posterior cross-vein is much shorter, and three times its length interior to them. Halteres have light stems and dark knobs.

Length: (female) 3 mm. (male) 2.5 mm.

Habitat: Rather widespread, but the first specimens were taken at Iloilo, Panay, P. I.

Taken at various times in the various places.

THE STANFORD EXPEDITION TO BRAZIL, 1911.

J. C. BRANNER, *Director.*

ACARIANS FROM BRAZIL.

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The mites collected by Messrs. Mann and Baker belong to two families, Ixodidæ and Parasitidæ (Gamasidæ). Several are the same as those described from Paraguay by Berlese; the ticks are species common in Brazil; of the six species described as new, the *Trachuropoda* is the most remarkable. Besides these there are some immature specimens, mostly of the Parasitidæ, that cannot be named.

IXODIDÆ.

Amblyomma striatum Koch. Two from Porto Velho, Rio Madeira (Mann and Baker).

Amblyomma geayi Neum. One from Abuná, Rio Madeira, Brazil (Mann and Baker).

Margaropus annulatus Say. Several from Porto Velho, Rio Madeira, Brazil, (Mann and Baker).

PARASITIDÆ.

Megalolalaps hæros Berl. Several from Independencia, Parahyba, on *Copris* (Mann).

Macrocheles cordiger Berl. Specimens, which are probably this species have the dorsal shield less narrowed behind than Berlese figures. They are from Porto Velho, Rio Madeira, on *Phanæus* (Mann).

Hypoaspis scutalis sp. nov.

Body about once and a half longer than broad, nearly truncate behind, sides nearly parallel. Dorsum without hairs, two stout ones on margin near tip, and short bristles on ventral edge near margin; palpi long and prominent; legs I and IV fully as long as body, last joint of leg I very much longer than the preceding joint; leg II rather stout in the middle; all with short hairs or spine-like bristles. Sternal plate with three hairs each side, not near margin, one on a small plate at base of coxa III. Vulva shows a triangular opening. Ventri-anal plate extremely broad in front, concavely narrowed on posterior sides, nearly twice as broad in front as long, a few stout bristles each side; anus with a hair each side. Length .7 mm.

From Abuná, Rio Madeira, Brazil (Mann coll.), on Scarabæidæ.

Hypoaspis invertus sp. nov.

Yellowish brown. Body nearly one and a half times as long as broad, narrowed in front, dorsum without hairs, except on margin, four each side behind, and two each side in front of coxæ III. Legs moderately slender, but short, and with few hairs. Sternal plate with three bristles on each side, one behind at base of coxa III, and another at base of coxa IV. Peritreme long, rather remote from the coxæ. Ventri-anal plate large, inverted pyriform, much broader in front, concavely narrowed behind, about three bristles each side in front, and one each side of the anus. Length, .6 mm.

From Abuná, Rio Madeira, Brazil, on Scarabæidæ (Mann coll.).

Megisthamus armiger Berl. One from Itacoatiara, Amazon, on large *Passalus* (Mann).

Euzercon balzani Berl. Several from Manaos, from Itacoatiara, Amazon, on large *Passalus*, and Porto Velho, Rio Madeira, Brazil, on Scarabæidæ. (Mann and Baker.)

Celænopsis subincisa Berl. One from Abuná, Rio Madeira, Brazil, on Scarabæidæ (Mann and Baker).

Celænopsis brevis sp. nov.

Body as broad as long, almost pointed at each end, dorsum with a transverse furrow over coxæ II, no hairs, except four rather long ones near margin beginning at middle, and smaller ones around hind margin. Beak and palpi prominent, leg I very long and slender, longer than body, last joint a little longer than the preceding; other legs moderately stout, all shorter than body; all legs with fine hairs and a stouter one on patellæ of legs III and IV; sternal plate (of ♀) only between coxæ II, two bristles each side; the vulva large, much narrowed behind; anus small, fully its length before end of ventral plate; peritreme long, angulate near coxæ III. Length, .65 mm.

From Abuná, Rio Madeira, Brazil (Mann coll.), on Scarabæidæ.

Celænopsis nitida sp. nov.

Red brown. Body plainly a little longer than broad, almost truncate behind; dorsum smooth, but each side near tip is a large curved spine, and the posterior margin bears a series of moderately long hairs. Venter with very small hairs on sternum; vulva between coxæ II and III, not very large; a large long spine each side on the beak. Leg I very long and slender, with few fine hairs; others legs short and stout, not as long as the width of body, fourth pair of legs stoutest, all with few hairs: peritreme long, close to the outer margin of coxæ; palpi long, first joint with several very long hairs on inner side. Length, 1.7 mm.

From Abuná, Rio Madeira, Brazil (Mann and Baker).

Uropoda frontalis sp. nov.

Red brown. Body nearly one and a half times as long as broad, in front produced in a slight median process, with a little hair at each side; the oral plate shows a median and slight lateral projection in front. Above and below without distinct hairs; legs very short, with few fine hairs, except at tip; the male genital aperture is small, and situate between the hind coxæ, a little nearer to the posterior than the anterior end of the body. Length, .6 mm.

From Natal, Brazil, on *Diploderus* (Mann coll.).

Discopoma? modesta Berl. One from Independencia, Brazil, on large Scarabæidæ, probably this species (Mann).

Trachyuropoda tricuspis sp. nov.

Body about once and a fourth longer than broad, broadest rather in front of the middle. Dorsum rough, behind near tip with three ridges which project slightly as three blunt cusps. All around the body is a thin membrane which is supported by many bristles, the outer third of each bristle is jointed and much finer than the basal part. The rostrum is bilobed at base, and with a curved spine each side, palpi short, with many hairs at tip. Legs short and stout, with few hairs, femora I and II with a plate-like process behind. Sternal shield with three hairs each side; male aperture twice as broad as long, situate between coxæ III; vulva large, sides straight, narrowed behind, in front with a U mark, and three hairs each side. Venter shows a few short hairs, and is crossed by a curved furrow beyond middle, anus has a hair each side. Length, .9 mm.

From Itacoatiara, Amazon, Brazil (Mann), on large *Passalus*.

EXPLANATION OF PLATE 8.

Fig. 1. *Celænopsis brevis*.

2. *Trachyuropoda tricuspis*; vulva, and tip of body from above.

3. *Celænopsis nitida*.

4. *Trachyuropoda tricuspis*.

5. *Uropoda frontalis*.

6. *Hypoaspis invertus*.

7. *Hypoaspis scutalis*.